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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,181	04/24/2006	Milan Lampic-Oplander	20496-503	3787
21890 7590 08/13/2008 PROSKAUER ROSE LLP PATENT DEPARTMENT 1585 BROADWAY NEW YORK, NY 10036-8299				
EXAMINER YEE, DEBORAH				
ART UNIT		PAPER NUMBER		
1793				
MAIL DATE		DELIVERY MODE		
08/13/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/563,181

**Applicant(s)**

LAMPIC-OPLANDER ET AL.

**Examiner**

Deborah Yee

**Art Unit**

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5/20/08.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: The wt% of each alloying element in Table 1a needs to be on one line rather than two lines, e.g.-- V 0.091%--- rather than " 0.09 " with "1" below it.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 to 19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over European patent 1213071 (hereinafter EP'071) cited by Applicant in IDS dated December 30, 2005 and its computer-generated English translation in view of US Patent 6,177,045 (hereinafter Ecob et al.) or Soviet Union patent 1803460 (SU'460) and Derwent publication of NL 150847- English abstract.

### ***Response to Arguments***

4. Applicant's arguments filed May 20, 2008 have been fully considered but they are not persuasive.
5. Applicant stated that inventive claims recite a high Mn content of 0.4 to 0.7% together with a specific range of 0.003 to 0.007% O<sub>2</sub>. The Mn content in the range of 0.4 to 0.7% assists in the formation of pearlite and that the O<sub>2</sub> of 0.003 to 0.007%

controls the speed and the extent of nucleation, which is also a factor in the formation of pearlite. In comparison, EP'071 does not teach or suggest a high Mn content together with a specific range of O<sub>2</sub> or identify the combination of high Mn and O<sub>2</sub> as a factor to be optimized to provide a successful result.

6. In response to Applicants' argument, it is the Examiner's position that the computer-generated English translation of EP'071 in claims 8 and 10 discloses a cast iron alloy having a composition with constituents whose wt% ranges overlaps those recited by the claims. In particular, prior art teaches a Mn range of up to 1% and O<sub>2</sub> range of at most 0.007% which overlap and therefore teaches portions of Applicant's Mn range of 0.4 to 0.7% and 0.003 to 0.007% O<sub>2</sub>, respectively.

7. In addition, specific prior art alloy example on line 35 on page 7 of EP'071 closely meets the claimed composition; and when calculated, satisfies the claimed Sc and MEG equation limitations. The prior art example contain 0.0035% O<sub>2</sub> (within claimed O<sub>2</sub> range of 0.003 to 0.007%) but contains 0.29% Mn (slightly outside the claimed Mn range of 0.4 to 0.7%). It is the Examiner's position, however, that it would be obvious to increase Mn since a broad Mn range of up to 1.0% is taught. Although it was submitted that the more narrowly claimed range of 0.4 to 0.7% Mn is critical to assist in the formation of pearlite, this is merely Applicants' statement with no convincing evidence. To distinguish claims over prior art, Applicant will need to demonstrate by comparative test data that the more narrowly claimed Mn range of 0.4 to 0.7% is critical and productive of new and unexpected results.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah Yee whose telephone number is 571-272-1253. The examiner can normally be reached on monday-friday 6:00 am-2:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Deborah Yee/  
Primary Examiner, Art Unit 1793

/DY/